




Colorectal Cancer in the
African American Population
“Impacting the Mortality”



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Cancer Statistics

- 1,300,000 new cases of invasive cancer will be diagnosed this yr in the U.S.
- An estimated 563,000 US citizens are expected to die of cancer
- The overall incidence in breast cancer in young women, and colon cancer in men and women is down
- US cancer death rates are **declining** in all major sites

Cancer Statistics

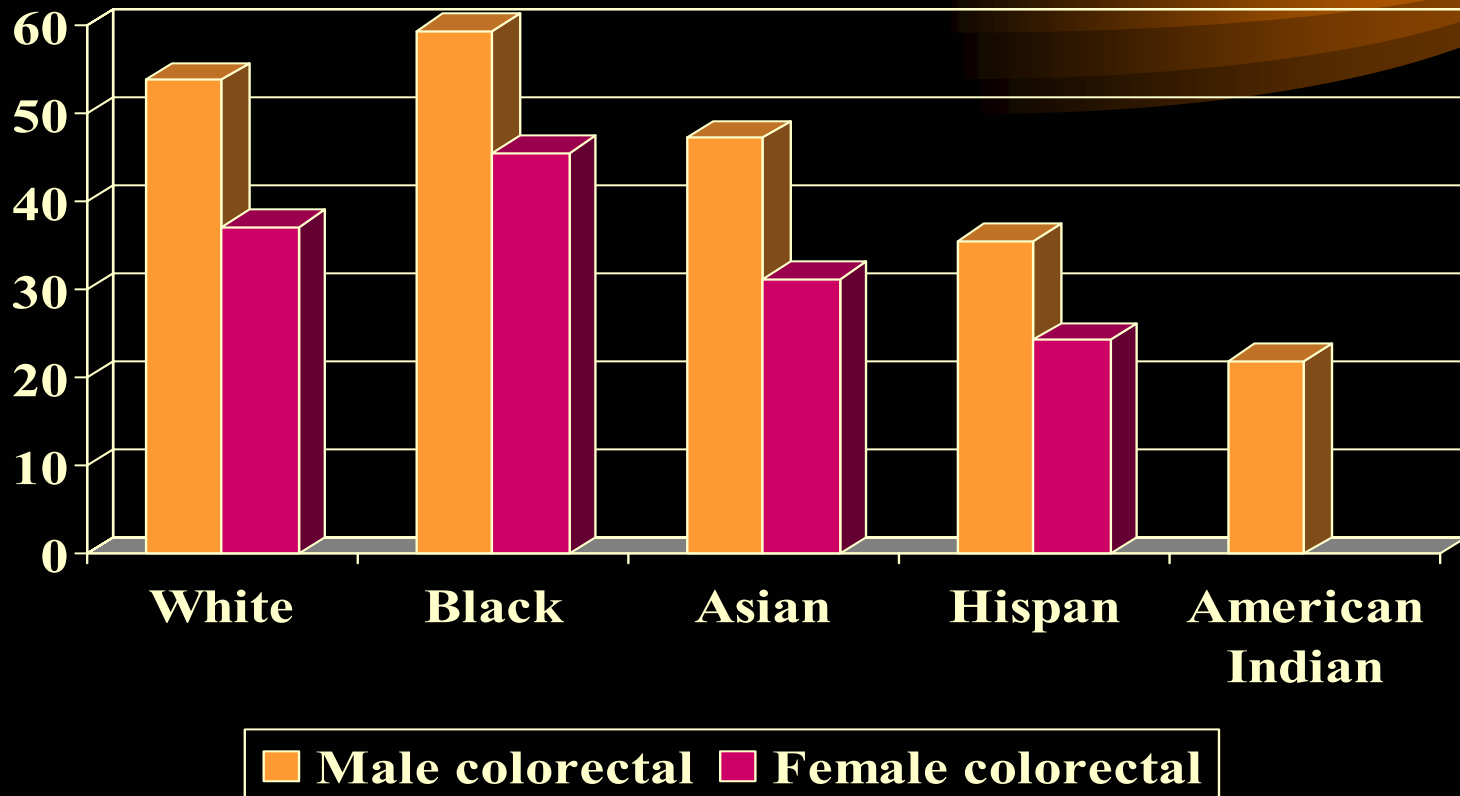
- 130,200 new cases of colorectal cancer in the yr 2000
- 3rd most common cancer in men and women
- Incidence has declined approx 1.4%/yr in the 1990's
- ↓ incidence 2° ↑ screening and polyp removal preventing progression of polyps to invasive cancer

Colon and Rectal Cancer Deaths



- 56,600 deaths per yr
 - 47,900 Colon
 - 8,700 Rectal
- Mortality rates have ↓↓ over last 20 yrs
- Earlier detection key to decreased mortality

Incidence Rates of Colorectal Cancer by Race Gender and Ethnicity, US, 1990-1995



Mortality Rates of Colorectal Cancer by Race, Gender, and Ethnicity, 1990-1995



Is Being African American A Risk for Dying of Colorectal Cancer?

American Cancer Society-Cancer Facts & Figures 2000:

- Blacks are more likely to develop cancer than persons of any other racial or ethnic group.
- Cancer incidence rates have decreased among all populations except among African Americans
- Blacks are 33% more likely to die of cancer than whites

Colon Cancer in African Americans

Why is the Mortality Higher?

- *Diagnosis at later disease stage?*
- Is it a different and/or more aggressive disease than in other races
- Inadequate treatment?
- Possible socioeconomic factors

Colon and Rectal Cancer

“Does It Hurt?”



*“The things that hurt you the most,
are the things that don't hurt
you...”*

Risk Factors for Colorectal Cancer

- Personal or family history of colorectal cancer or polyps
- History of inflammatory bowel disease
- Possible factors include physical inactivity
- High fat/ low fiber diet

Colorectal Cancer Signs and Symptoms

- Rectal Bleeding
- Blood in Stool
- Change in bowel habits
- **None**

Colorectal Cancer

Methods of Prevention

- Education
 - Patient education
 - Need to know why they need screening
 - Need to know signs and symptoms
 - Need to know reimbursement options
 - Physician education
 - Every physician should know current screening guidelines
 - Insurance Carrier education
 - Don't recognize the benefit of testing for cancer prevention and therefore many don't reimburse for cost of exam

Colorectal Carcinoma

Barriers to Optimal Care

- Patient education
- Physician education
 - Lack of knowledge regarding routine screening
- Monetary barriers
 - Pts with no insurance
 - Insurance carriers that don't reimburse for screening

Early Detection Screening Options

Beginning at age 50

Current Guidelines

- Fecal occult blood test every yr, and flexible sigmoidoscopy every 5 yrs
- Colonoscopy every 10 yrs
- Double contrast barium enema every 5-10yrs

Colorectal Cancer Methods of Prevention



- Colorectal screening
 - At age 50 flexible sigmoidoscopy and hemoccult testing
 - Increased risk: Begin screening earlier, and screen with colonoscopy

Colorectal Carcinoma

Barriers to Optimal Care

- Access barriers
 - Access to mass media for mass patient education
 - Access to funds for promotional screening programs and education
 - Awareness of existing programs aimed at community education
 - Patient access to appropriate health care personnel

Colorectal Carcinoma

Barriers to Optimal Care



- Cultural barriers
 - Patient distrust of White European medical institution¹
 - Cultural communication disparity

Education Relative to the African American Population

- Methods of education
- Focus on cultural and community sensitive educational tools,
 - Church
 - Radio (Tom Joyner Morning Show, 104.7, etc)
 - Culturally focused media (Ebony, Jet, Essence)

Methods of Prevention Relative to African American Population



- Colorectal screening
 - 65 % of colon lesions in Black are found in right colon³
 - Average risk, asymptomatic population should therefore begin colonoscopic exam at age 50 rather than sigmoidoscopy

Benefits of Colonoscopy over Sigmoidoscopy

- Colonoscopy evaluates entire colon.
Especially important in African Americans
- Colonoscopy allows diagnosis and treatment of amenable tumors possibly resulting in a cure for early cancers
- If sigmoidoscopy + patient still needs colonoscopy

Benefits of Screening in Colorectal Cancer

- Potentially diagnoses cancers at their earliest stages, polyps
- Potentially allows for curative therapy such as polypectomy without major surgery
- If lesion found at early stages and tumor unresectable through the scope, minimally invasive laparoscopic procedures may provide cure

Early Detection Screening Options

Moderate risk pts

- Pts with family history of cancer of adenomatous polyp
- Personal history of adenomatous polyp or cancer
- Inflammatory bowel disease

*Recommendations for Improving
Efforts to Combat Colorectal
Cancer*



Screening and Education

Recommendations for Improving Efforts to Combat Colorectal Cancer



- Education
 - Are they getting it?
 - Foster an atmosphere of trust to decrease negativism
 - Use cultural and community sensitive educational tools (radio, church, mass media)

Recommendations for Improving Efforts to Combat Colorectal Cancer



- Educate the educators
 - Programs to assure that all clinical medical personnel are up to date on screening criteria
 - Institute quality assurance programs that track physician compliance in their recommendations for patient screening

Nobody Knows?

- As January 1998, a newly enacted US law now provides American citizens, at both average risk and high risk, with the benefit of Medicare coverage for routine colorectal cancer screening(included in provisions of the US Balanced Budget Act of 1997).

Recommendations for Improving Efforts to Combat Colorectal Cancer



Screening

- Routine colonoscopic exam for African Americans over the age of 50 ³
- Earlier colonoscopy for those patients with risk factors

Conclusions

- Research suggests that colorectal cancer in African Americans may be a different disease
- Colorectal cancer continues to affect African Americans disproportionately than other ethnic groups
- Mortality rates continue to be higher although significant advances have been made in this field

Conclusions

- Current mechanisms of patient education are inadequate
- We need cultural and community sensitive educational tools to reach the underserved population
- Adopt screening guidelines that will effectively impact the mortality of this curable disease

Conclusions

Needs



- Support funding of programs that utilize cultural and community sensitive educational tools (radio, church, mass media)
- Encourage compliance with recommended guidelines for colorectal screening
- Support research funding to develop new guidelines for screening of colorectal in the African American population

Cancer experiences of African-American women as portrayed in popular mass magazines.

Psychooncology - 1999 Jan-Feb; 8(1): 36-45

Department of Health Studies and Gerontology, University of Waterloo, Ontario, Canada. LH-GO

Authors:

Hoffman-Goetz L

Abstract:

Popular magazines provide opportunities for teachable moments about **cancer** prevention and control to broad segments of the population. The purpose of this study was to evaluate attitudes and beliefs about **cancer** as presented in magazine **cancer** stories with a predominant readership of African-American women. Information was collected on full length cancer stories in *Jet*, *Ebony* and *Essence* from 1987 to 1995. There were 11 personal stories about cancer impact on women in the magazine issues over 9 years. Five themes emerged: religiosity, cancer fatalism, quality of life after diagnosis, interactions with medical personnel, and treatment choices. Within each theme area, specific subthemes were identified. Within religiosity, subthemes included the importance of faith, God's role, and the challenge to the spirit of a cancer diagnosis. *Negative interactions with the medical system were described in 45% (5/11) of the stories.* Quality of life emerged as an important issue in the **cancer** stories with death and dying, and pain or side-effects of treatment appearing in 64% (7/11) of the narratives. **These results suggest that narratives in magazines with predominant readership among African-American women emphasize religious beliefs in cancer survival and present mixed attitudes towards European-American medical institutions. Mass media contributes to that discourse which shapes women's attitudes about survival from cancer.**

Cancer experiences of African-American women as portrayed in popular mass magazines.

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Screening colonoscopy in asymptomatic average-risk African Americans

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From the Department of Medicine, Division of Gastroenterology, Indiana University School Of Medicine, and the Richard A. Roudebush Veterans Administration Hospital, Indianapolis, Indiana..

Background: Recent data indicate that colorectal cancer incidence and mortality in white Americans have been declining since 1985 at a rate of 2% to 3% per year. In African Americans, however, mortality from colorectal cancer appears to be increasing. We sought to evaluate the prevalence of colonic neoplasia in asymptomatic African Americans.

Methods: We performed a cross-sectional colonoscopy screening study to determine the prevalence of colonic neoplasia in asymptomatic African Americans older than 50 years of age.

Results: One hundred sixty-six subjects were evaluated for the study of whom 121 (69 women) were deemed to be asymptomatic average-risk persons and completed colonoscopy. Forty-two individuals (35%) had a total of 72 adenomas (67 tubular and 5 tubulovillous); 47 (65.3%) of these were proximal to the splenic flexure. Three subjects had an adenoma 1 cm or greater in diameter and none had severe dysplasia.

Conclusions: The overall prevalence of adenomas in asymptomatic average-risk African Americans was comparable to that of previously described populations. The predominance of right-sided adenomas in this study confirms previous findings and is an area requiring further study. Until this issue is resolved, we suggest the use of colonoscopy rather than sigmoidoscopy for screening for colorectal neoplasia in asymptomatic, average-risk African Americans. (Gastrointest Endosc 2000;51:524-7.)

Time trends in distal colorectal cancer subsite location related to age and how it affects choice of screening modality.

Nelson RL - *J Surg Oncol* - 1998 Dec; 69(4): 235-8

Department of Surgery, University of Illinois College of Medicine, Chicago 60612, USA.

Nelson RL; Persky V; Turyk M

Abstract:

BACKGROUND AND OBJECTIVES: A time trend analysis of colorectal cancer (CRC) incidence in the distal colorectum as a proportion of total CRC is presented for the period 1977-1994 as a function of age, to determine the age at which Americans might best be served by screening fiberoptic sigmoidoscopy. **METHODS:** CRC incidence rates were obtained for each anatomic subsite from SEER Public Use Files for 1977, 1986, and 1994. The colorectum was divided anatomically for these analyses at the junction of the descending **colon** and sigmoid **colon**. Incidence in the distal colorectum was divided by total CRC incidence to determine the proportion of CRC in that age/race/gender/year cohort located in the distal colorectum.

RESULTS: The proportion of distal CRC among African Americans was without a clear trend as they grew older in each of the years of observation and in both genders. However, in whites, with increasing age, the proportion of distal disease declined progressively in both genders, with the greatest decline in 1994. Distal CRC became less prevalent than proximal at about age 72 years in white women and at age 82 in white men in 1994.

CONCLUSIONS: As the white population becomes older, and for African Americans of all ages, more total colon screening modalities are needed, although at the onset of recommended screening, among 50- to 60-year-olds, fiberoptic sigmoidoscopy would appear efficacious.

Racial differences in the anatomical distribution of colon cancer.

Thomas CR Jr - *Arch Surg* - 1992 Oct; 127(10): 1241-5

Department of Medicine, University of Washington Medical Center, Seattle 98195.

Abstract:

The objective of this study was to determine whether racial differences exist with regard to the anatomical distribution of adenocarcinoma of the colon. We conducted a retrospective study of consecutive patients with primary colon cancer seen during a 12-year period (1976 to 1987) identified by the Rush Tumor Registry. The setting was a large, tertiary-care, private medical center, located in the inner city of Chicago, Ill. A chi 2 unpaired Student's t test of association was performed to detect any statistically significant difference in the anatomical sites of distribution between blacks and whites. A statistically significant percentage of black patients had proximally located primary colon lesions compared with white patients. This observation was independent of the actual anatomical definition of right-sided or proximal colon lesions. These findings suggest that a significant percentage of black and white patients are less likely to be diagnosed with colon cancer at a more curable stage, when abiding by the current screening guidelines of the American Cancer Society and the National Cancer Institute. The impact is greater on black patients with adenocarcinoma of the colon.

Determination of factors responsible for the declining incidence of colorectal cancer.

Nelson RL - *Dis Colon Rectum* - 1999 Jun; 42(6): 741-52

Department of Surgery, College of Medicine, School of Public Health, University of Illinois at Chicago, USA.

Nelson RL; Persky V; Turyk M

Abstract:

INTRODUCTION: After rising for 13 years in the United States, the incidence of colorectal cancer began to fall in 1986 and has continued to drop since then. This report contains an analysis of the pattern of declining colorectal cancer risk by colorectal subsite, race, and gender and a time trend investigation of suspected risk modifiers of colorectal cancer. **METHOD:** Colorectal cancer incidence data were obtained from the Surveillance, Epidemiology, and End Results Public Use Files from 1973 to 1994. The following exposure variables were assessed, focussing principally on the period 1970 to 1980: dietary fat, fiber, ethanolic beverages, vitamin A, vitamin C, iron, calcium, estrogen, aspirin, energy intake, body mass index, serum cholesterol, body iron stores, cholecystectomy, constipation, cigarette use, physical activity, and colonoscopic polypectomy. Data sources used in these analyses were principally National Health and Nutrition Examination Surveys I, II, and III. **RESULTS:** After 1985 colorectal cancer incidence declined predominantly in the distal colorectum almost equally in both white males and white females. Some exposures remained unchanged or trended in the wrong direction (dietary fat, calcium, ethanol, energy intake, physical activity, overweight prevalence, and cholecystectomy). Others did not apply equally to both genders (estrogen, aspirin, ethanol, calcium, and cholecystectomy). Others may become significant in the future, such as aspirin, estrogen, or calcium, because their supplementation is now prevalent, but were not in 1970 to 1975. Of all the risk factors or interventions assessed, the one most consistent with the observed pattern of change is increased use of colonoscopic polypectomy. **CONCLUSION: The best method to diminish the incidence of colorectal cancer today may be to increase the use of screening colonoscopy and polypectomy.**

Colorectal cancer surveillance in African-American and white patients at an urban university medical center.

Borum ML - *J Natl Med Assoc* - 1999 Sep; 91(9): 505-8

George Washington University Medical Center, Washington, DC 20037, USA.

Borum ML

Abstract:

Colorectal **cancer** causes significant morbidity and mortality in the United States.

Recommendations for colorectal **cancer** screening have been developed. This study evaluated the colorectal **cancer** screening practices of African-American and white patients by internal medicine resident physicians. A retrospective chart review was conducted during 1989-1994. The performance of rectal examination, fecal occult blood testing, and flexible sigmoidoscopy among patients > 50 years was evaluated. The medical records of 200 patients (90 men and 110 women) were reviewed. Ninety-one rectal examinations, 26 fecal occult blood testing, and 30 flexible sigmoidoscopies were performed. There were 129 African-American (54 men and 75 women) and 52 white (26 men and 27 women) patients. Of the African-American patients, 57 underwent a rectal examination, 17 had fecal occult blood testing, and 26 underwent flexible sigmoidoscopy. Of the white patients, 24 had a rectal examination, 8 had fecal occult blood testing, and 12 underwent flexible sigmoidoscopy. **These results demonstrate that resident physicians adhered poorly to colorectal cancer screening recommendations. There was no statistically significant difference in the screening of African-American and white patients. Increased efforts should be made to improve colorectal cancer screening practices by resident physicians.**

Medical residents' colorectal cancer screening may be dependent on ambulatory care education.

Borum ML - *Dig Dis Sci* - 1997 Jun; 42(6): 1176-8

Department of Medicine, George Washington University Medical Center, Washington, DC 20037, USA.

Authors:

Borum ML

Abstract:

Colorectal **cancer** results in significant morbidity and mortality in the United States. Screening is a critical component of **cancer** prevention. **However, research has suggested that physicians may inconsistently adhere to surveillance guidelines.** Since residency training can significantly impact upon future practice patterns, assessment of postgraduate colorectal **cancer** education is important. This retrospective chart review of patients \geq 50 years of age compared screening performed by resident physicians' in different internal medicine residency programs at The George Washington University Medical Center. Resident physicians who received multiple lectures in colorectal **cancer** surveillance or **were required to document performance of screening on a medical record preventive care summary form performed significantly more rectal examinations ($P < 0.0004$), fecal occult blood testing ($P < 0.00001$), and flexible sigmoidoscopies ($P < 0.00001$) when compared to other resident physicians.** Postgraduate education should employ multiple education techniques and reinforcement procedures to increase physician compliance with **cancer** screening

The recruitment of African-Americans to cancer prevention and control studies.

Paskett ED - *Prev Med* - 1996 Sep-Oct; 25(5): 547-53

Authors:

Paskett ED; DeGraffinreid C; Tatum CM; Margitic SE

Abstract:

BACKGROUND: African-Americans have the highest overall age-adjusted cancer incidence and mortality rates of any population group in the United States. Despite this fact, this group remains underrepresented in cancer prevention and control research studies, primarily because most recruitment strategies result in limited access to African-American populations. **METHODS:** As part of three large-scale cancer prevention and control studies, effective strategies for recruiting African-American participants were developed and implemented. **RESULTS:** Eight strategies have been identified as successful recruitment strategies for involving African-Americans in cancer prevention and control studies. Utilizing these strategies resulted in recruiting a representative number of African-American participants, in relation to the local population, into the three studies. **CONCLUSIONS: African-Americans can be recruited to participate in cancer control and prevention studies if plans include special strategies targeted to addressing unique barriers, beliefs, and concerns.**

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- Director Department of Endosurgery Atlanta Medical Center
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- Diplomate of the American Board of Surgery and Fellow of the American College of Surgeons
- Published over 50 articles related to Minimally Invasive Surgery
- Performed 1st laparoscopic cholecystectomy in St. Petersburg, Russia. Performed 1st laparoscopic hernia repair in Salzburg, Austria. 1st to perform laparoscopic hernia repair in St. Petersburg Russia. One of the 1st to perform laparoscopic cholecystectomy in the United States
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